



FACILITY COMPLIANCE INSPECTION REPORT

Division of Waste Management Solid Waste Section

UNIT TYPE:										
Lined MSWLF		LCID		YW		Transfer		Compost	SLAS	COUNTY: Alamance PERMIT NO.: 01-02 FILE TYPE: COMPLIANCE
Closed MSWLF		HHW		White goods		Incinerator	X	T&P	FIRM	
CDFL		Tire T&P / Collection		Tire Monofill		Industrial Landfill		DEMO	SDTF	

Date of Site Inspection: May 21, 2013 **Date of Last Inspection:** May 30, 2012

FACILITY NAME AND ADDRESS:

Stericycle, Inc. Medical Waste Incinerator Facility
 1168 Porter Avenue
 Haw River, NC 27258

GPS COORDINATES: N: 36.06599 E: -79.34881

FACILITY CONTACT NAME AND PHONE NUMBER:

Stericycle, Inc.
 A. Alan Skrzypczak, Facility Manager
 w. 336-578-8900 x.24
 c. 336-269-2140
 f. 336-578-8900
askrzypczak@stericycle.com

FACILITY CONTACT ADDRESS:

Stericycle, Inc.
 Don Nuss, Regional Environmental Manager – Atlantic Region
 3614 Hoskins Court
 Hamilton, OH 45011
dnuss@stericycle.com

PARTICIPANTS

John Patrone, Environmental Senior Specialist - Solid Waste Section (SWS)
 Hugh Jernigan, Environmental Senior Specialist – SWS
 Bill Patrakis, Environmental Senior Specialist – SWS
 Layla Cummings, Agency Legal Specialist – DENR
 Dale Rich, Regional Operations Director – Stericycle, Inc.
 Don Nuss, Regional Environmental Manager (Atlantic Region) – Stericycle, Inc.
 Al Burson, Corporate Director of Environmental Quality – Stericycle, Inc.
 Carol McCormick, Regional Operations Manager – Stericycle, Inc.

STATUS OF PERMIT:

Permit To Operate (PTO) issued May 4, 2012
 PTO expiration date January 31, 2016

PURPOSE OF SITE VISIT:

Comprehensive Inspection and Complaint Investigation

STATUS OF PAST NOTED VIOLATIONS:

None

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OBSERVED VIOLATIONS

None

The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

ADDITIONAL COMMENTS

On May 21, 2013, John Patrone, Hugh Jernigan, Bill Patrakis, and Layla Cummings met with Dale Rich, Don Nuss, Al Burson, and Carol McCormick to conduct a comprehensive inspection and complaint investigation of the Stericycle, Inc. Medical Waste Incinerator Facility on Porter Avenue in Haw River, Alamance County.

1. The facility is a medical waste treatment operation consisting of two incineration units.
2. A medical waste transfer station is operated at the facility.
3. During the inspection both incinerators were in operation.
4. The facility incinerates medical waste (regulated and non-regulated), United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service - Plant Protection and Quarantine (APHIS-PPQ) regulated garbage, controlled substances, chemotherapeutic waste, healthcare industry documents, and pharmaceuticals.
5. Stericycle, Inc. vehicles transport ~ 99 percent of the material it receives.
6. The facility uses an electronic system called Road Net to track drivers dispatched on local routes from Haw River. Driver data is displayed on a large monitor. The system uses GPS to obtain real-time information regarding route, driver status, truck location, etc.
7. The office is open Monday through Friday 8:00 am to 5:00 pm. Incineration occurs 24 hours, 7 days a week.
8. The facility has accepted waste material from various states and Washington, DC.
9. The facility permit, site plan, operations plan, and contingency plan were discussed.
10. The facility provides training for plant personnel (general health & safety and job specific duties), updated as needed. Employee files were verified representative of health & safety training conducted May 2013 and incinerator operations conducted October 2012.
11. Regulated medical waste containers have a label with barcode containing generator and material information. The barcode is scanned at pickup and upon incineration. Scanned information is sent to a database, updated to include treatment date, etc.
12. The facility maintains records of the amount of solid waste received and origin of loads. Records were verified for June 1, 2012 through May 20, 2013. The facility receives ~ 2,000,000 lbs a month.
13. The facility routinely operates both incinerators. Scheduled maintenance is conducted for each incinerator ~ every 3 or 4 weeks for ~ 4 days. Incinerator maintenance was last conducted in April 2013. Throughput records, that demonstrate a decrease in waste acceptance, were verified for the specific time period. It was stated that the ~ 2M lbs/month acceptance rate reflects incinerator scheduled maintenance cycles.
14. The facility annual report (FAR) dated July 6, 2012 was received by the SWS. Facility throughput for July 2011 through June 2012 is 13,270 tons or 26,539,232 lbs. The amount of ash produced from incineration during the same time period is 4,098.7 tons.
15. Incinerator ash is disposed of at the Upper Piedmont Regional Landfill – Republic Services of North Carolina LLC (73-04).
16. Ash is stored on site in 20 yd³ roll-off containers. Generally, two containers are filled with ash daily. Six days a week - two containers a day are hauled to the landfill.
17. The facility has five scales (within the operations area): two floor scales, two belt scales, and a portable scale. The scales were tested by Carlton Scale on April 5, 2013, zero error is indicated.
18. The facility has a Division of Air Quality (DAQ) Title V permit, number 05896/T20, issued 03/01/12 – expiration 01/31/16.

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19. During the inspection the facility was conducting its most recent (DAQ) emissions test. Data on file references the previous emissions test conducted March 20 - 22, 2012. Per DAQ letter dated May 23, 2012, the results were found to be acceptable. The emission sources tested are two natural gas automatic feed dual chamber controlled air Joy Energy Systems, Inc. T-Series incinerators, model number 2500 TES, each with packed bed scrubber in series with venturi scrubber.
20. The maximum charging rate for each incinerator is 1,911 lbs/hour and processing capacity for both units is 91,728 lbs/day. The secondary chamber retention time is 2.28 seconds @ 2000° F or 2.02 seconds @ 1800° F. The DAQ permit states the maximum charging rate for unit 1 is 1,952.6 lbs/hour and for unit 2 is 2,091.9 lbs/hour.
21. If the facility plans to increase the charging rate of the incinerators, from 1,911 lbs/hour to current DAQ charging rates, the SWS should be contacted prior to a change in operation.
22. The facility maintains continuous monitoring records of the primary and secondary chamber temperatures. Records were verified for May 13, 2013 and October 31, 2012. Records indicate that the temperature in the primary chamber was maintained $\geq 1200^{\circ}$ F and temperature in the secondary chamber was maintained $\geq 1800^{\circ}$ F.
23. During the inspection incinerator unit No. 1 was operating at 1479° F in the primary chamber and 2123° F in the secondary chamber and 42.3 inches water column (W.C.) across the venturi scrubber. And incinerator unit No. 2 was operating at 1662° F in the primary chamber and 1962° F in the secondary chamber and 42.2 inches W.C. across the venturi scrubber.
24. It was stated that the incinerator reduces material to ash in ~ 3 – 4 hours and is batch-fed ~ every 6 minutes. And that the ash represents a 68 – 70 percent volume reduction.
25. The facility has an Industrial User Pretreatment Permit (No. 0030) from the City of Graham issued July 1, 2011 – expiration June 30, 2016.
26. All process water associated with facility operation is treated on site. Treated water is piped to the City of Graham wastewater treatment plant (WWTP).
27. Reusable containers are washed with a mycobactericidal disinfectant. After contents are removed, the containers are washed on the floor adjacent to the incinerators. Floor drains route to the process water treatment system.
28. Vehicle trailers are cleaned with a pressure washer and mycobactericidal disinfectant in the truck wash bay. The truck wash bay floor drains are piped to tanks for reuse in the incinerator ash water quench process.
29. Each incinerator is equipped with the following ash removal process: Ash drops from the rear of the incinerator into a water quench tank. A mechanical arm rakes the ash from the quench tank, dragging it up a dewatering ramp. The ash is deposited into a 2 yd³ container. Facility personnel sort out large pieces of ash (2 -4 times/hour), raking it into a 30 gallon cart. The sorted ash is re-incinerated.
30. The 2 yd³ containers are dumped into 20 yd³ roll-off containers. The 20 yd³ containers are dewatered on a covered cement slab. Floor drains are piped for reuse (of the drained ash water) in the incinerator ash water quench process. At the time of the inspection there were four containers on site: two full, one being filled, and one containing some ash for use on the weekend.
31. The facility conducts two representative ash samples annually. It conducts a toxicity characteristic leaching procedure (TCLP), paint filter test for liquids, and pH. Results were reviewed for samples analyzed by Pace Analytical Services, Inc. on October 5, 2012. Results showed compliance. The most recent samples were taken on May 9, 2013. Composite samples are gathered from a 20 yd³ roll-off container.
32. The facility waste screening process consists of: generator requirements to properly package and label boxes/containers, drivers trained to refuse boxes/containers if inaccurately packaged and/or labeled, customer contract requires clients abide by waste acceptance rules, Stericycle, Inc. account personnel meet with clients, related information available via printed material and online, employee training regarding unacceptable waste, and facility personnel routinely screen ash noting material requiring reburn.
33. It was stated that a contingency plan (pertaining to the transfer of regulated medical waste) is maintained in each vehicle and that drivers are familiar with the plan.
34. The universal biohazard symbol was observed displayed on trailers.
35. During the inspection the facility had ~ 34 refrigerated trailers on site and ~ 8 non-refrigerated trailers.

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36. The temperature display was observed on several refrigerated trailers. All were between 35 and 45° F.
37. Hold time was verified for eight trailers: three were empty, one was used for storage equipment, and four (refrigerated trailers) were on site for < 7 days.
38. It was stated that material stored in refrigerated trailers, pertaining to transfer station operation, is not commonly treated at the facility.
39. The facility stages boxes/containers on the receiving floor for transfer to other facilities and transfer station(s).
40. Transit time was verified on three containers observed at the facility. Manifest/barcode check indicate that two containers picked up from the generator (one 7 days ago and one 1 day ago) were on the process line to be incinerated and one container picked up from the generator seven days ago was empty, its contents processed through the incinerator earlier in the day.
41. The facility submitted a revised operations plan, dated August 9, 2012.
42. A complaint regarding receipt of unacceptable material was investigated. Records were observed that indicate the facility did not receive the material in question during the timeframe stated.
43. The facility has permit information posted in the office lobby.
44. The facility is secured by a locked gate.
45. Entry to the facility is via intercom located outside of the gate.
46. Access roads are of all weather construction.
47. The PTO expiration date is January 31, 2016.
48. The PTO renewal application shall be submitted to the SWS by July 31, 2015.

Please contact me if you have any questions or concerns regarding this inspection report.



John Patrone
Environmental Senior Specialist
Regional Representative

Phone: 336-771-5095 Fax: 336-771-4631

Sent on: <u>May 24, 2013</u>	<input checked="" type="checkbox"/>	Email	<input type="checkbox"/>	Hand delivery	<input type="checkbox"/>	US Mail	<input type="checkbox"/>	Certified No. <u> </u>
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Copies:

- Michael Scott, Section Chief
- Jason Watkins, Western District Supervisor
- Ellen Lorscheider, Environmental Supervisor
- Ed Mussler, Permitting Branch Head
- Hugh Jernigan, Environmental Senior Specialist
- Bill Patrakis, Environmental Senior Specialist
- Larry Frost, Environmental Engineer
- Sarah Rice, Compliance Officer